

## REMARKS

This amendment is submitted in response to the Final Office Action dated April 30, 2007. Reconsideration and allowance of the claims are requested. In the office action, claims 7, 8, 11 and 12 are rejected under 35 USC §112 as being indefinite. The Examiner states that as to these claims it is not clearly understood what comprises a map of sequences. This rejection is respectfully traversed.

Paragraph [0029] at page 6 of the application states in part "dedicated processor 102 possesses a roadmap for the execution sequence prior to actual execution of the application." This is the same terminology used in the claims, and the terminology is explained in depth in the following paragraphs [0029] – [0040]. The map of sequences which runs on the dedicated processor controls the dedicated processor, which is dedicated solely to resource allocation and the task of parsing the script file so that the dedicated processor is able to synchronize exactly when each resource should be allocated to each of multiple processors in the system. Therefore, the language questioned by the Examiner is in fact clearly defined and establishes, in part, the scope of the present claimed invention in a manner that not only complies with 35 USC §112, but clearly distinguishes the present invention from the prior art.

As claimed herein, the present application comprises a method and apparatus within a multi-processor environment where multiple processes, which are part of a single application, are executed within the multi-processor environment. The system also includes scarce resources which are required for use at different times by each of the multiple processors. The allocations of the scarce resources are defined in advance by a script, which runs on a processor dedicated solely to determining the most efficient use of the multiple other processors in running the single application. As defined in each of the claims, the script running on the dedicated processor is parsed by that processor to determine the resources required by one or more other processors in the multi-processor environment. The available resources are then allocated to a particular processor immediately prior to execution of a task by that processor.

The Examiner, in rejecting the claims, relies on Hvostov (US Publication 2003/0039211), specifically citing the BAS server. However, the BAS method and

apparatus are different than these claimed herein. Hvostov teaches a communication system with a distributed architecture used for allocating bandwidth to multiple target units. There is no teaching therein of a system wherein multiple processors are cooperating to execute a single application, as claimed in the present application and as inherently occurs in a multi-processor environment. Rather, the targets 22 of the BAS server 26 are operating separately, requesting bandwidth allocation, and being answered by the BAS server 26 based on multiple history stores 30, 32 and 34 and algorithms 36 for sorting those histories. There is no cooperation between the individual targets 22 to which the BAS server makes allocations. Further, there is no script stored on a dedicated processor which contains a map of the sequences that will occur during the execution of at least one task in the multi-processor environment. Lack of interaction among the target units to complete the task, the lack of a script provided to the dedicated processor, where the script contains an advance map of sequences to occur among the various processors, and a script engine and the dedicated processor cooperating to parse the advance script to allocate multiple resources, as needed, by multiple processors for execution of an application all distinguish the Hvostov reference from the pending claims.

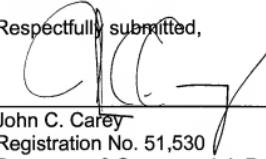
The Examiner also cites Pitot (US Patent 5,375,208). However, Pitot only teaches the existence of resources, such as memory and matrix configuration. Pitot does not provide any teachings of a dedicated processor allocating resources as claimed herein.

Further, there is no suggestion that Pitot could properly combine with Hvostov, as Hvostov has no need for allocating buffer memory (claim 6) or matrix configuration (claim 4), as disclosed by Pitot. Therefore, a person of skill in the art would not be motivated to have any reason to make the combination proposed by the Examiner outside the motivation provided by the present invention. Finally, Hvostov further significantly differs from the present application in that the claims herein clearly recite dynamically allocating the resources at execution time in order to optimize the execution of the application. There is no such teaching in Hvostov, which does not take into account the efficient operation of the units with which the BAS server communicates. In fact, the BAS server performs only bandwidth allocation tasks and does so in a manner

that is intended only to make fair use of the end units 22 such that each unit receives some communication bandwidth within a reasonable period of time. This is contrary to the most efficient and fastest use of shared resources, which is the focus of the present application and pending claims.

In summary, in view of the lack of a teaching of a multi-processor environment dedicated in running an application distributed among the multi-processors, the lack of an advance script provided to the dedicated processor which contains resource allocation information, and the lack of dynamic allocation of resources, as needed, all as claimed herein, reconsideration and allowance of claims is respectfully submitted.

Respectfully submitted,

  
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